

8. (New) The thin-film EL device according to Claim 1, wherein said patterned electrode layer has a pattern comprising a plurality of stripes.

9. (New) The thin-film EL device according to Claim 1, wherein a line width of said stripes is 200 to 500  $\mu\text{m}$  and a space between said stripes is about 20  $\mu\text{m}$ .

10. (New) The thin-film EL device according to Claim 1, wherein said patterned electrode layer comprises an oxide conductive material, a base metal, a noble metal, a noble metal alloy and a combination of a noble metal with a nonmetal element.

11. (New) The thin-film EL device according to Claim 1, wherein a specific dielectric constant of said dielectric layer is at least 10 times as large as the thickness of the dielectric layer as expressed in  $\mu\text{m}$ .

12. (New) The thin-film EL device according to Claim 1, wherein said dielectric layer comprises a material selected from the group consisting of dielectric materials having perovskite structures, composite perovskite-relaxor ferroelectric materials, bismuth layer-structured compounds and tungsten bronze ferroelectric materials.

13. (New) The thin-film EL device according to Claim 1, wherein said coating-and-firing processe comprises a sol-gel process, an MOD process or a combination thereof.

14. (New) The thin-film EL device according to Claim 1, wherein a thickness of said dielectric layer at least four times as large as the thickness of said patterned electrode layer.

15. (New) The thin-film EL device according to Claim 1, wherein said light-emitting layer comprises ZnS doped with Mn .

16. (New) The thin-film EL device according to Claim 1, wherein said light-emitting layer comprises SrS:Ce.

17. (New) The thin-film EL device according to Claim 1, wherein said light-emitting layer has a thickness of 100 to 2,000 nm.

18. (New) The thin-film EL device according to Claim 1, further comprising an insulator layer disposed on said light-emitting layer.

19. (New) The thin-film EL device according to Claim 18, wherein said insulator layer has a thickness of 50 to 1,000 nm.

20. (New) The thin-film EL device according to Claim 1, wherein said transparent electrode layer comprises an oxide conductive material.

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### **BASIS FOR THE AMENDMENT**

New Claims 6-20 have been added.

New Claim 6 is supported at page 9, lines 22-25.

New Claim 7 is supported at page 9, lines 26-33.

New Claim 8 is supported at page 10, 1<sup>st</sup> paragraph.

New Claim 9 is supported at page 10, lines 8-9.

New Claim 10 is supported at page 10, lines 10-27.

New Claim 11 is supported at page 11, lines 12-14.

New Claim 12 is supported at page 11, lines 19-31.

New Claim 13 is supported at page 11, line 32 to page 12, line 12.

New Claim 14 is supported at page 15, line 36 to page 16, line 1.

New Claim 15 is supported at page 17, lines 26-27.

New Claim 16 is supported at page 17, lines 28-29.

New Claim 17 is supported at page 17, lines 34-36.

New Claim 18 is supported at page 18, lines 24-25.

New Claim 19 is supported at page 19, line 1.

New Claim 20 is supported at page 19, first full paragraph.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 1-20 will now be active in this application. Claims 4 and 5 stand withdrawn from consideration as being drawn to non-elected subject matter.

### **INTERVIEW SUMMARY**

Applicants wish to thank Examiner Harper and Supervisory Examiner Patel for their helpful and courteous discussion with Applicants' Representative on June 11, 2003. During this discussion it was noted that Mizukami et al fail to disclose or suggest a thin film EL device in which the dielectric layer itself is a multilayer formed by repeating a solution-coating and firing step several times. In fact, none of the dielectric layers disclosed in Mizukami et al appear to have a multilayer structure. In addition, the dielectric layers are obtained by conventional reactive sputtering technics. Further, the superior properties of the dielectric multilayers obtained according to the present invention were discussed in view of the Examples of the specification of the present application and the Figures which are now attached to the Rule 132 Declaration filed herewith.

### **REQUEST FOR RECONSIDERATION**

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

The present invention as set forth in **Claim 1** relates to a thin-film EL device having at least a structure comprising an electrically insulating substrate, a patterned electrode layer

stacked on said substrate, and a dielectric layer, a light-emitting layer and a transparent electrode stacked on said electrode layer, wherein:

**said dielectric layer is a multilayer dielectric layer formed in a multilayer form by repeating a solution coating-and-firing step plural times, and**

said multilayer dielectric layer has a thickness of at least four times as large as a thickness of said electrode layer and 4  $\mu\text{m}$  to 16  $\mu\text{m}$  inclusive.

In contrast, Mizukami et al fail to disclose or suggest a thin film EL device in which the **dielectric layer itself is a multilayer** formed by repeating a solution-coating and firing step several times. In fact, none of the dielectric layers disclosed in Mizukami et al appear to have a multilayer structure. Mizukami et al disclose, for example, an EL matrix display panel having two distinct dielectric films 3 and 5 in Figure 1 and col. 2, lines 50-53. None of the layers 3 and 5 has a **multilayer structure** formed by repeating a solution-coating and firing step several times. In fact, the dielectric layers of Mizukami et al are obtained by **conventional reactive sputtering technics** and not by the claimed repeating a solution-coating and firing step several times. The structures of the dielectric layers resulting from the different techniques are illustrated by the Figures filed with the Rule 132 Declaration. A **dielectric layer (a)** prepared by a **sputtering process** was compared to a **dielectric layer (b)** prepared by the **MOD process** according to the present invention. As can be seen from the SEM photographs, each layer of the MOD film comprises a collection of fine particles. On the other hand, the sputtered film presents a **rupture section suffering inter-particle destruction** with undetectable particle size. However, as discussed, for example, at page 6 of the English specification, poor light emission results from the surface defects of such dielectric layer. This is what the present invention addresses by the multilayer dielectric films obtained by repeating a solution-coating and firing step several times. (An additional

discussion of a dielectric layer obtained by a sputtering process are discussed at page 14, line 36 to page 15, line 20.) Thus, the structures of the dielectric layers of the present invention and those of Mizukami et al are different. In addition, the dielectric layer obtained by the claimed process does not have the defects that lead to poor light emission. Costly polishing steps are not necessary (specification, page 6, last paragraph). This is not disclosed or suggested by the reference.

Therefore, the rejection of Claims 1-3 under 35 U.S.C. §103(a) over Mizukami et al is believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

The Office has required restriction in the present application as follows:

Group I: Claims 1-3; and

Group II: Claims 4 and 5.

Applicants affirm their provisional election, with traverse, of Group I, Claims 1-3.

Applicants traverse the Restriction Requirement on the grounds that the Claims of Group II relate to a method of making an EL device such as that claimed in Group I. As such, Groups I and II should not be separated.

In addition, the Office has characterized the inventions of Group I and Group II as related as process of making and product made. Citing MPEP §806.05(f) the Office suggests that the product as claimed can be made by a materially different process, such as forming the dielectric layer by "vapor deposition instead of repeated coating-and-firing." However, there is no evidence of record to show that the claimed product could be made as the Office has alleged. If, in fact, the claimed product can be made by "vapor deposition instead of repeated coating-and-firing," the Office has failed to show that the alleged process is materially different from the claimed process. Accordingly, Applicants respectfully submit that the

Restriction Requirement is unsustainable, and it should therefore be withdrawn.

Applicants respectfully traverse the Restriction Requirement on the grounds that no adequate reasons and/or examples have been provided to support a conclusion of patentable distinctness between the identified groups or shown that a burden exists in searching all the claims.

Moreover, the MPEP in §803 states as follows:

“If the search and examination of an entire application can be made without a serious burden, the Examiner must examine it on the merits, even though it includes claims to distinct or independent inventions.”

Applicants respectfully submit that a search of all the claims would not impose a serious burden on the Office.

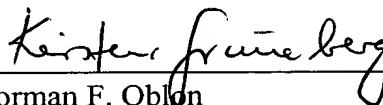
Accordingly, and for the reasons presented above, Applicants submit that the Office has failed to meet the burden necessary in order to sustain the Restriction Requirement. Withdrawal of the Restriction Requirement is respectfully requested.

Finally, Applicants note that MPEP §821.04 states, "if applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims which depend from or otherwise include all the limitations of the allowable product claim will be rejoined." Applicants respectfully submit that should the elected group be found allowable, the non-elected claims should be rejoined.

Applicants submit that the present application is now in condition for allowance and early notice of such action is earnestly solicited.

Respectfully submitted,

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MARKED-UP COPY OF AMENDED CLAIMS

Claims 6-20.(New)